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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Brian J. Conaway

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EXAMINER

TORRES, ALICIA M

ART UNIT

PAPER NUMBER

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/789,880	Applicant(s) CONAWAY ET AL.	
	Examiner Alicia M. Torres	Art Unit 3671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10-12, 15, 16, 23, 24 and 29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-12, 15, 16, 23, 24 and 29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the support (22) and passage of claim 12 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "20" has been used to designate both the locking device in Figures 1 and 2 and a handle socket in Figure 4. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended

replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claim 7 is objected to because of the following informalities: in line 2 "plurality interlocking" should be changed to —plurality of interlocking—;

In line 2, "to define" should be changed to —define—.

Appropriate correction is required.

DETAILED ACTION

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 29 is rejected under 35 U.S.C. 102(b) as being anticipated by Arason 795,383.

Arason discloses a leaf rake comprising, in combination:

a head (B);

an elongate handle (A) extending from the head (B);

a plurality of parallel, spaced-apart, flexible tines (E) extending from the head (B)
opposite the handle (A);

wherein the flexible tines (E) extend from the head (B) substantially parallel to the handle
(A, see Figure 1);

a brace (D) movable along the tines (E) between first and second positions to change
effective stiffness of the flexible tines (E);

a locking device selectively operable to releasably secure the brace (D) to the head (B)
and including a knob (L) selectively rotatable to lock and unlock the locking device;

wherein the knob (L) extends to the brace (D, through parts) through a slot (I') in the
head (B) and moves along the slot (I') as the brace (D) moves along the tines (E);

wherein the brace (D) moves relative to the handle (A) as the brace (D) moves between
the first and second positions; and

wherein spacing between the tines (E) remains unchanged as the brace (D) moves
between the first and second positions.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 5-8, 10, 11, 23, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burke 3,804,451 in view of Jerner et al. 2,083,786.

8. Burke discloses a rake comprising, in combination:

a head (11);

an elongate handle (10) extending from and directly secured to the head (11) and

extending to the tines (12);

a plurality of parallel, spaced-apart, flexible tines (12) extending from the head (11) opposite the handle (10) and substantially parallel to the handle (10), the tines (12) being unremovable from the head (11, it should be noted that almost anything can be removed from it's base, whether by using a hacksaw or cutting with a torch any rake tine could be removed from it's head);

a brace (16) movable along the tines (12) between first and second positions to change effective stiffness of the flexible tines (12);

a locking device (17) selectively operable to releasably secure the brace (16) to the head (11) in each of the first and second positions to prevent movement of the brace (16) relative to the tines (12);

wherein the brace (16) moves relative to the handle (10) as the brace (16) moves between the first and second positions;

wherein spacing between the tines (12) remains unchanged as the brace (16) moves between the first and second positions;

wherein the locking device (17) is selectively operable to releasably secure the brace (16) to the head (11) at predefined locations between the first and second positions to prevent movement of the brace (16) relative to the tines (12);

the handle (10) is secured to the head (11) to prevent relative movement therebetween as the brace (16) moves between the first and second positions; and

wherein a knob (15) extends to the brace (16) through a slot (in bracket 13) in the head (11) and moves along the slot (13) as the brace (16) moves along the tines (12).

However, Burke fails to disclose wherein the locking device includes a plurality of interlocking protrusions and grooves formed in the head and the brace and a knob operable to bring the protrusions and grooves into and out of engagement to lock and unlock the brace; and

wherein the plurality of interlocking protrusions and grooves formed in the head and the brace define a plurality of positions for the brace relative to the head.

Jerner et al. discloses a similar raking apparatus including a locking device having a plurality of interlocking protrusions (21) and grooves (formed in knob 20) formed in the head (5, 6, 8) and the brace (7) and a knob (20) operable to bring the protrusions (21) and grooves (in knob 20) into and out of engagement to lock and unlock the brace (7); and

wherein the plurality of interlocking protrusions (21) and grooves (of knob 20) formed in the head (5, 6, 8) and the brace (7) define a plurality of positions for the brace (7) relative to the head (5, 6, 8).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the protrusion and groove locking device of Jerner et al. on the rake of Burke in order to provide a releasable lock for the brace relative to the head in various positions, the locking device being simple to manufacture, constructed at a low and reasonable cost and shaped in a compact manner.

Regarding claims 5 and 6, the invention is disclosed as stated above, except for the particularly claimed materials of construction. However, it would have been an obvious matter of design choice to construct the rake of plastic and/or metal materials as there appears to be no unexpected results by choosing one material or the other disclosed by the applicant.

9. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burke in view of Jerner et al. as applied to claim 1 above, and further in view of Florence 4,236,742.

The device is disclosed as applied above. However, the combination fails to disclose wherein each of the tines extends through separate openings in the brace.

Florence discloses a similar rake wherein each of the tines (20) extends through separate openings (36) in the brace (18).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the separate tine openings of Florence on the rake of Burke and Jerner et al. in order to provide reinforcement for the tines when the rake is in use.

Regarding claims 3 and 4, the invention is disclosed as stated above, except for the particularly claimed t-shaped cross-section of the tines and the openings. However, it would have been an obvious matter of design choice to construct the tines and openings as t-shaped as there appears to be no unexpected results disclosed by the applicant by the unitary piece.

10. Claims 12, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burke in view of Jerner et al. as applied to claim 11 above, and further in view of Bickar 5,527,077.

The device is disclosed as applied above. However, the combination fails to disclose wherein the head includes a socket at the tines and a cylindrical support forming a passage extending through the support and spaced apart from the socket, and wherein the handle extends through the passage and into the socket.

Bickar discloses a rake wherein the head includes a socket (16) at the tines (22) and a cylindrical support (80) forming a passage extending through the support (80) and spaced apart from the socket (16), and wherein the handle (14) extends through the passage and into the socket (16).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the handle mounting system of Bickar on the rake of Burke and Jerner et al. in order to provide support for the brace adjusting apparatus.

Regarding claim 15, the invention is disclosed as stated above, except for the particularly claimed unitary construction of the socket support and head. However, it would have been an

obvious matter of design choice to construct the rake head, socket and support as a unitary piece as there appears to be no unexpected results disclosed by the applicant by the unitary piece

Response to Arguments

11. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia M. Torres whose telephone number is 571-272-6997. The examiner can normally be reached Monday through Friday from 7:00 a.m. – 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached at 571-272-6998.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is 571-272-3600. The fax number for this Group is 571-273-8300.

**/Alicia M. Torres/
Patent Examiner
Group Art Unit 3671**

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November 17, 2007